

REMARKS

As an initial matter, the Applicants would like to thank the Examiner for his time and consideration in conducting the telephone interview on June 4, 2007.

As explained to the Examiner during that interview, the present invention has been developed in order to address a problem in conventional pull-out guide assemblies. Specifically, as noted on page 1, lines 10-17 of the original specification, in a pull-out guide assembly in which a running carriage is mounted between a support rail and a pull-out rail, a deviation in the correct position of the running carriage in relation to the support rail and/or the pull-out rail often occurs due to slippage over time. Specifically, in this type of arrangement, a running carriage is designed to move outwardly (to open) or inwardly (to close) at a rate of speed that is, for example, approximately half the speed of the pull-out rail relative to the support rail. However, if the running carriage slips during operation, the running carriage may temporarily move at a speed greater than or less than its desired speed, thereby causing a deviation from the correct position of the running carriage with respect to the support rail and the pull-out rail. Over time, this undesirable deviation can prevent the drawer from being fully closed or completely opened during normal use.

In order to address the problem discussed above, the present invention is directed to a pull-out guide assembly comprising a running carriage that includes a locking device operable to lock the running carriage to the pull-out rail. An explanation of the present invention as recited in independent claims 22 and 44 will now be provided below with reference to various portions of the present application. However, reference to any portions of the present application is provided only for illustrative purposes, and is not intended to otherwise limit the scope of the claims to any specific embodiment. In particular, the explanation of the "locking device" provided below is only one example of a locking device which can be utilized in the present invention.

Each of amended independent claims 22 and 44 recite that a running carriage 3 is mounted between a support rail 1 and a pull-out rail 2 and is operable to move between a front end position and a rear end position in a differential manner. Each running carriage 3 includes a

locking device which is operable to lock the running carriage 3 to the pull-out rail 2 at a first predetermined point located between the front end position and the rear end position, and is operable to unlock the running carriage 3 from the pull-out rail 2 at a second predetermined point located between the front end position and the rear end position due to relative movement between the support rail and the pull-out rail.

An explanation of one possible example of the locking device as set forth in the present application will now be provided with reference to Figures 13a-13e and 15a-15e, and page 7, line 21 through page 8, line 12 of the original specification. In this particular example, the locking device is comprised of several components including a rocker 17 on the running carriage 3, a tab 19 on the support rail 1, and an opening 50 in the pull-out rail 2. Of course, this is not the only possible structural arrangement which can constitute a locking device as recited in independent claims 22 and 44, and other possible structural arrangements might also be envisioned by one of ordinary skill in the art based on the present disclosure.

Figures 13a-13e illustrate a situation in which there is ideal movement of the running carriage 3 (i.e., a situation in which there is no deviation from the correct location of the running carriage 3). Specifically, the running carriage 3 is located at a position such that the rocker 17 extends through the opening 50 in the pull-out rail 2. As the running carriage 3 and the pull-out rail 2 are moved to the right, the rocker 17 eventually reaches the edge of tab 19 which allows it to pivot downwardly (see Figures 13c and 13d) so that the pull-out rail 2 can continue moving to the right at a greater speed than the running carriage 3 without interference.

Figures 15a-15e illustrate a situation in which the pull-out rail 2 and the running carriage 3 are moving to the right, but the running carriage 3 has deviated from the ideal position (due, for example, to slippage). In this case, the rear edge of the opening 50 in the pull-out rail 2 contacts a stop face of the rocker 17 while the rocker 17 “sits” on the tab 19 (see Figure 15a). At this first predetermined point, the running carriage 3 becomes “locked” to the pull-out rail so as to correct the deviation. The running carriage 3 then temporarily moves at the same speed as the pull-out rail 2 until the rocker 17 of the running carriage 3 reaches the front end of the tab 19 as illustrated in Figure 15c. At this second predetermined point, the deviation in the position of the running

carriage relative to the pull-out rail 2 and the support rail 1 has been corrected, and so the rocker 17 disengages from the rear edge of the opening 50 as illustrated in Figure 15d (i.e., the locking device “unlocks” the running carriage from the pull-out rail). Therefore, the running carriage 3 and the support rail 2 can both continue moving to the right at their respective correct speeds with no deviation in their correct relative positions (see Figure 15e).

In the outstanding Office Action, the Examiner rejected independent claims 22 and 44 and the elected claims that depend therefrom under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, the Examiner asserted that it did not appear from the original disclosure that the locking device is operable to lock the running carriage to the pull-out rail as recited in the independent claims. However, as explained to the Examiner during the telephone interview on June 4, 2007 and summarized above, the original disclosure does, in fact, explain how the locking device locks the running carriage 3 to the pull-out rail 2. Specifically, Figures 15a-15e and page 8, lines 6-12 of the original specification clearly explain that the running carriage 3 is fixed temporarily (i.e., locked) to the pull-out rail 2 and temporarily moves with the pull-out rail 2 at the same speed until the deviation is corrected. The Examiner appeared to acknowledge this fact during the interview, and so the Examiner is now formally requested to withdraw the rejection under section 112 in view of the above explanation.

The Examiner also rejected independent claims 22 and 44, as well as several of the elected dependent claims, as being anticipated by the Rock reference (US 4,089,567). In particular, at the top of page 4 of the outstanding Office Action, the Examiner asserted that the Rock reference teaches a running carriage that includes a locking device 22 which is operable to lock the running carriage to the *support rail* 1 at a first predetermined point, and which is operable to unlock the running carriage from the *support rail* 1 at a second predetermined point. In this regard, although independent claims 22 and 44 were previously amended to recite that the locking device must be operable to lock the running carriage to the *pull-out rail*, the Examiner apparently interpreted the claims as requiring that the locking device is operable to lock the running carriage to the *support rail*, in view of the indefiniteness rejections under section 112. However, as explained above, the limitation requiring that the locking device be operable to lock

the running carriage to the *pull-out rail* is not indefinite, and is fully supported by the original disclosure. Furthermore, as previously explained in detail in the response filed January 5, 2007, the Rock reference does not disclose or even suggest a locking device which is operable to lock a running carriage to a *pull-out rail*, and which is also operable to unlock the running carriage from the pull-out rail (and the Examiner is referred to pages 10-12 of the previous response filed January 5, 2007 for more detail in this regard).

In the interview summary sheet, the Examiner implied that the “locking device” corresponds to the rocker 17, and therefore stated that the locking device is “just one element in a collective group of elements needed in order to perform the intended function.” Therefore, the Examiner further stated that he is maintaining the prior art rejections because the “lack of clarity/general broadness allows for multiple interpretations of the cited reference.” However, as noted above and previously explained in detail in the response filed January 5, 2007, and as apparently acknowledged by the Examiner on page 4 of the outstanding Office Action, the Rock reference clearly does not disclose or even suggest *any* component that could reasonable be interpreted as a locking device operable to lock a running carriage to a *pull-out rail*, and which is operable to unlock the running carriage from *the pull-out rail*. Therefore, the Applicants do not completely understand the Examiner’s comments set forth in the interview summary sheet. To the extent that the Examiner is asserting that the “lack of clarity” of the claims constitutes indefiniteness, the Applicants strongly disagree. Specifically, it is well established that breadth of a claim is not to be equated with indefiniteness. See *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). Because the Rock reference does not teach all of the elements recited in independent claims 22 and 44, it is respectfully submitted that the Rock reference does not anticipate the pending claims. Furthermore, because the prior art of record does not even suggest each of the elements recited in the pending claims, it is submitted that the pending claims are clearly patentable over the prior art of record.

In addition to the features of independent claims 22 and 44 that distinguish the present invention from the prior art as discussed above, the Examiner’s attention is directed to several of the dependent claims that recite additional subject matter further distinguishing the present

invention from the prior art. In particular, dependent claim 37 recites that the locking device comprises *a rocker that is tiltably mounted on the running carriage*, and the rocker has two stop faces shaped to abut against a stop on each of the support rail and the pull-out rail. Thus, dependent claim 37 further defines one embodiment of the locking device by reciting some of the structure that enables this particular locking device to lock the running carriage to the pull-out rail, and to unlock the running carriage from the pull-out rail. It is submitted that the prior art, and particularly the Rock reference, does not teach or even suggest a locking device that comprises a rocker tiltably mounted on a running carriage and having two stop faces for abutting against a stop on each of a support rail and a pull-out rail, as recited in new dependent claim 37. Therefore, in addition to the reasons discussed above with respect to independent claims 22 and 44, it is respectfully submitted that dependent claim 37 is clearly patentable over the prior art of record.

In addition, dependent claim 43 recites that the locking device is operable to lock the running carriage to the pull-out rail at the first predetermined point *if a position of the running carriage with respect to the support rail and the pull-out rail is incorrect so as to thereby correct the position*. Thus, this dependent claim further clarifies the present invention as discussed above with respect to Figures 15a-15e. In contrast to these features, the pull-out guide of the Rock reference allows the entire drawer and the guide rail to be withdrawn from the support rail (see column 1, lines 34-37), while preventing the mobile unit (i.e., carriage) 6 from being pulled completely out of the support rail 1. However, there is no suggestion in the Rock reference to provide a locking device which is capable of locking a running carriage to a rail if the position of the running carriage with respect to the rail is incorrect. Therefore, in addition to the reasons discussed above with respect to independent claims 22 and 44, dependent claim 43 is further distinguishable from the prior art.

In view of the above remarks, it is submitted that the present application is now in condition for allowance. However, if the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact the Applicant's undersigned representative.

Respectfully submitted,

Egon BLUM et al.

By: 

W. Douglas Hahm
Registration No. 44,142
Attorney for Applicants

WDH/mjw
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
June 18, 2007